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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Yun-Ting Lin

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10/06/2005

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EXAMINER

GOINS, DAVETTA WOODS

ART UNIT

PAPER NUMBER

2632

DATE MAILED: 10/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

ck

Office Action Summary	Application No. 10/602,835	Applicant(s) LIN, YUN-TING	
	Examiner Davetta W. Goins	Art Unit 2632	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8-13, 15, 16, 19, 21 and 23-28 is/are rejected.
- 7) ☒ Claim(s) 6, 7, 14, 17, 18, 20 and 22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Allowable Subject Matter

1. Claims 6, 7, 14, 17, 18, 20 and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5, 8-13, 15, 16, 19, 21 and 23-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kikinis (US Pat. 6,778,171 B1) in view of Lazo et al. (US Pat. 6,791,603 B2).

In reference to claims 1, Kikinis discloses a) the claimed video surveillance system for following a visual object based on image information provided by one or more cameras, which is met by camera set-ups 259 through n (col. 6, lines 52-60), b) the claimed RF surveillance system that identifies an RF-object based on reception information provided by a plurality of receivers, which is met by the each player and or football including a tracking device 201, 202, 203 that transmit the location of each object to a receiver radio tower 240 (col. 7, lines 7, lines 12-23), and c) the claimed object linker, operably coupled to the video surveillance system that is configured to link the visual-object to the signals from the object, which is met by the radio

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tower 240 and a computer 242 are connected together by a link 241a, which links the detected objects through the detection of visual images from the cameras as well as the location determined by the transmitter devices 201-203 located on the objects on the field (col. 7, lines 12-67; col. 8, lines 1-39; Figure 3). Although Kikinis does not specifically disclose the claimed video surveillance system that “identifies” a visual object based on image information provided by the camera, he does disclose that each object continuously re-evaluates its position, either by receiving GPS signals and re-transmitting those signal coordinates with an ID, or, for example, by using the (four) corner stations 211, 212, 213 and 214 and radio telemetry devices that make it possible to locate each object. Lazo discloses a surveillance system including a couple of tracking video cameras 24 and 26 used to monitor objects or persons upon entry into a specific surveillance zone; an RFID tag 20 is used along with RFID reader 22 to help track the person(s) within either surveillance zone1 or zone 2 (col. 3, lines 17-67). Once the RFID reader 22 communicates with controller 10, the asset will be identified (col. 4, lines 12-20). Since both Kikinis and Lazo disclose systems that detect RF signals from objects, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of “identifying” the object from the camera, as disclosed by Lazo, with the system of Kikinis, to ensure that the cameras will continue to monitor specified objects with an id that’s recognized by the controller.

In reference to claims 2-4, 8-10, Kikinis discloses the claimed video surveillance system configured to determine a first location coordinate corresponding to the visual object, and the RF surveillance system configured to determine a second location corresponding to the RF-object,

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which is met by the radio tower 240 and computer 242 determine the coordinates of each object with accuracy by collected information from the cameras and transmitted devices attached to the objects ((col. 5, lines 24-67; col. 6, lines 1-67; col. 7, lines 1-42). Although Kikinis does not specifically disclose the claimed calibration module, he does disclose that each object continuously re-evaluates its position, either by receiving GOS signals and re-transmitting those signal coordinates with an ID or by using the four corner stations 221-214 and radio telemetry such that the x' , y' and z' coordinates of the objects can be determined (col. 7, lines 19-48). Since Kikinis discloses that there is a continuous re-evaluation of the position of each monitored object, it would have been obvious to one of ordinary skill in the art at the time of the invention to include a calibration module that ensures that the coordinates are adjusted on a continuous bases to provide real-time location of the monitored objects.

In reference to claims 11-13, 15-16, 19, 21, 25, 27, 28, Kikinis discloses a) the method of attaching a tag to a visually identifiable object, which is met each player and or football including a tracking device 201, 202, 203 that transmit the location of each object to a receiver radio tower 240 (col. 7, lines 7, lines 12-23), b) the claimed method of determining a first location coordinate of the object based on an appearance of the object in a scent by a video camera and determining a second location coordinate of the object based on reception from a plurality of receivers and the claimed method of determining one or more adjustment parameters that facilitates a reduction in a difference between the first and second location coordinates of the object, which is met by camera set-ups 259-n used to follow the location of each object to generate 3D images to determine the x , y , z coordinates representing the players (col. 6, lines 52-

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60; col.7, lines 38-58). Although Kikinis does not specifically disclose the claimed method of determining one or more adjustment parameters that facilitate a reduction in a difference between the first and second location coordinates of the object, he does disclose that each object continuously re-evaluates its position, either by receiving GOS signals and re-transmitting those signal coordinates with an ID or by using the four corner stations 221-214 and radio telemetry such that the x' , y' and z' coordinates of the objects can be determined (col. 7, lines 19-48).

Since Kikinis discloses that there is a continuous re-evaluation of the position of each monitored object, it would have been obvious to one of ordinary skill in the art at the time of the invention to include a calibration module that ensures that the coordinates are adjusted on a continuous bases to provide real-time location of the monitored objects.

In reference to claims 23, 26, Kikinis discloses the claimed method of at least one of the parameters is dependent upon a speed of motion of the RF transmitter, which is met by overlaying the two objects, an image can be obtained such that the tracking element 201 traces player 101 accurately at any given time, even through scene changes and camera motion and so forth, because the virtual world will reflect all the positions of actual objects in the real world through the transmission of the radio locators including the camera, view direction, zoom factor, and other factors (col. 8, lines 23-45).

4. Applicant's arguments with respect to claims 1-28 have been considered but are moot in view of the new ground(s) of rejection.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Davetta W. Goins whose telephone number is 571-272-2957.

The examiner can normally be reached on Mon-Fri with every other Fri. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Wu can be reached on 571-272-2964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Davetta W. Goins
Primary Examiner
Art Unit 2632



D.W.G.

September 26, 2005